

AST4710 *High Accuracy Absolute* *Stainless Steel Pressure Sensor*

OVERVIEW

The AST4710 is built for applications requiring absolute pressure measurement of liquids and gases that are compatible with stainless steel. Due to its stainless steel construction, welded housing and high shock and vibration ratings, the AST4710 translates into a rugged, reliable absolute pressure sensor. Supplied with various pressure port, output and electrical connection options, the AST4710 is well-suited for a variety of applications across many industries. The AST4710 is approved to CE EN61326 certification.

BENEFITS

- ✓ High Accuracy
- ✓ High Strength Stainless Steel Construction
- ✓ Wide Range of Media Compatibility
- ✓ No Internal O-rings
- ✓ Wide Operating and Compensated Ranges
- ✓ Rugged Construction
- ✓ CE EN61326
- ✓ Suitable for High Shock and Vibration

APPLICATIONS

- ✓ Test Stands
- ✓ Energy and Water Management
- ✓ Autoclave
- ✓ Pressure Instrumentation
- ✓ Data Loggers
- ✓ Barometric Correctors



Performance @ 25°C (77°F)	
Accuracy*	< ± 0.25% BFSL
Stability (1 year)	±0.25%FS, typ
Over Range Protection	2X Rated Pressure
Burst Pressure	5X Rated Pressure
Pressure Cycles	>10 Million

* Accuracy includes non-linearity, hysteresis & non-repeatability

Environmental Data	
Temperature	
Operating	-40 to 85°C (-40 to 185°F)
Storage	-40 to 125°C (-40 to 250°F)
Thermal Limits	
Compensated Range	0 to 70°C (30 to 160°F)
TC Zero	<±1.0% of FS
TC Span	<±1.5% of FS
Other	
Shock	100G, 11 msec, 1/2 sine
Vibration	20G peak, 20 to 2400 Hz.
EMI/RFI Protection:	Yes
Rating:	IP-66

Electrical Data			
Output	10mV/V	4-20mA	Voltage 3,4 Wire
Excitation	5VDC, typ	10-28VDC	10-28VDC
Output Impedance	5K Ohms, Nominal	>10k Ohms	<100 Ohms, Nominal
Current Consumption:	<5mA	20mA, typ.	<10mA
Bandwidth	(-3dB): DC to 1kHz	(-3dB): DC to 250 Hz	(-3dB): DC to 1kHz
Output Noise:	N/A	-	<2mV RMS
Zero Offset:	<±2% of FS	<±1% of FS	<±1% of FS
Span Tolerance:	<±2% of FS	<±2% of FS	<±1.5% of FS
Output Load:	>1M Ohm	0-800 Ohms@10-28VDC	10k Ohms, Min.
Reverse Polarity Protection	N/A	Yes	Yes

ORDERING INFORMATION

AST4710 A A0100 P 4 A 1 000

Series Type

Process Connection

A=1/4" NPT male
 C=1/4 BSP male
 F=7/16"-20 UNF male
 J= 1/8" NPT female
 [Panel Mount
 option code "066" required]

Pressure Range

Insert 5-digit pressure range code from chart

Pressure Unit

P=PSI, B= Bar

Outputs

A=10mV/V 4=4-20mA (Loop Powered)
 2=0-5V (3-Wire) 5=0-10V (3-Wire)
 3=1-5V (3-Wire)

Electrical

A=2Ft. Cable E=Mini DIN 43650C
 B=4Ft. Cable I=DIN43650A
 C=6Ft. Cable R=Bendix 6 Pin
 D=10Ft. Cable

Wetted Material

1=316 L

Options

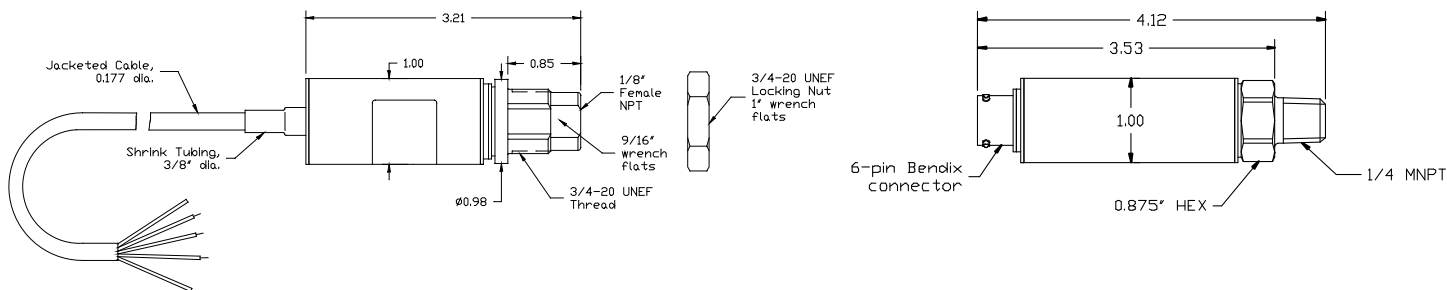
000= No Special Options
 066= Panel Mount (1/8"-27 NPT Female Only)

Pressure Ranges

PSI ABSOLUTE	PROOF PSIA	BURST PSIA	PRESSURE RANGE CODE
0-15	30	75	A0015
0-30	60	150	A0030
0-50	100	250	A0050
0-100	200	500	A0100
0-200	400	1000	A0200
0-300	600	1500	A0300

BAR ABSOLUTE	PROOF BAR	BURST BAR	PRESSURE RANGE CODE
0-1	2	5	A0001
0-2	4	10	A0002
0-3	6	15	A0003
0-7	14	35	A0007
0-15	30	75	A0015
0-20	40	100	A0020

DIMENSIONAL DATA



Warranty

Workmanship - AST, Inc. pressure transmitters have a limited one-year warranty to the original purchaser. AST, Inc. will replace or repair, free of charge, any defective transmitter. This warranty does not apply to any units that have been modified; misused, neglected or installed where the application exceeds published ratings. AST4710 is not recommended for use with hydrogen. AST's sensors are made with pride in New Jersey, USA. If in the area please feel free to stop by for a visit!

Installation/Applications - The purchaser is responsible for media compatibility, functional adequacy, and correct installation of the transmitter.

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